REMARKS

Claims 15-28 presently appear in this case. No claims have been allowed. The Official Action of January 21, 2009, has now been carefully studied. Reconsideration and allowance are hereby respectfully urged.

Briefly, the present invention is directed to a method for selecting a subject that would be suitable for anti-inflammatory treatment by means of a A3 adenosine receptor (A3AR) agonist. From among those subjects in an inflammatory state that are candidates for such treatment, the level of expression of A3AR in a sample of their white blood cells is determined and, if the level of expression of A3AR is above a predefined threshold that is above the level of A3AR expression in WBCs of a healthy subject, that subject is determined as being suitable to receive such anti-inflammatory therapeutic treatment. Thus, the method of the present invention is not directed to a method of treatment but only to a method of selection. The present invention is also directed to a method for determining the probability that a selected subject in an inflammatory state will respond to A3AR agonist anti-inflammatory therapeutic treatment. In this method, the level of expression of A3AR in a sample of white blood cells of the subject is determined and then, if the level of A3AR expression is above a predefined threshold that is above the

level of A3AR expression in WBCs of a healthy subject, a determination is made that there is a greater probability that the subject will respond to the anti-inflammatory treatment.

The interview among examiners Singh and Marx and the undersigned attorney, conducted on January 16, 2009, is hereby gratefully acknowledged. In this interview, the proposed changes to the claims submitted herewith were discussed and the undersigned explained that it was not intended for the claims to read on a method of treatment but only on a method for selecting subjects which are suitable to receive such treatment by means of A3AR agonists, or a method for determining the probability that a selected subject in an inflammatory state will respond to such treatment. None of the claims have a treatment step. With respect to the "predetermined level," language was proposed, as supported by the specification, that requires that this predetermined level be above the level of A3AR expression in WBCs of a healthy subject. In dependent claims, language was proposed that the predefined threshold is a multiple of such level. It was explained that this language is sufficiently clear to allow those of ordinary skill in art to understand the metes and bounds of the invention. The arguments against the rejections presented hereinbelow are essentially the same as those presented at the interview. While no specific agreement was

reached at the interview, the examiners agreed that they would reconsider the claims in light of the new claim language and their better understanding of applicants' position following the interview.

The examiner states that claim 19 recites limitation of "IB-MECA" and the examiner presumes that this is an abbreviated version of a chemical compound's name. The examiner has requested that applicant recite the full chemical name of the compound in the claim to help maintain clarity of the invention claimed and examined.

While it is believed that "IB-MECA" is the common generic name for the compound being referred to, nevertheless, this compound's chemical name has now been added to the present specification at page 14, line 13, as well as to claims 19 and 26 as per the examiner's request. Note that the insertion of this chemical name is not new matter. Reference is made, for example, to Szabo 1998 and Mabley 2003, which are references 7 and 8 on page 2 of the specification and copies of which are of record in this case by means of an IDS. Both of these publications, in their abstracts, use the nomenclature that we have added to the specification as being the same as IB-MECA. It should be noted that Fishman 2002, Fishman 2003, Madi 2003 and Fishman 2004, references 1,2,3 and 5 on pages 1 and 2 of the present specification and also of

record by means of IDS, also set forth the chemical name of IB-MECA but using a slightly different nomenclature. While the chemical formula of the compound is the same, the nomenclature used in these references is 1-deoxy-1-[6-[[(3-iodophenyl)-methyl]amino]-9*H*-purine-9-yl]-*N*-methyl-β-D-ribofuranuronamide. These are merely alternate nomenclatures for the same compound and these references confirm that the chemical compound referred to as IB-MECA is consistent in the literature. It is also interesting to note that IB-MECA is mentioned,for example, in Baharav 2002 and Madi 2004 without any other chemical name, thus showing that the literature understands that the name "IB-MECA" fully defines the compound being referred to in the eyes of persons of ordinary skill in the art. Accordingly, it is believed that the examiner's suggestion has now been met.

Claims 15-20 have been rejected under 35 USC §112, second paragraph, as being indefinite. The Examiner states that it is unclear as to what is being claimed in claim 15 as claim 15 encompasses a method of treatment, i.e., "to receive anti-inflammatory therapeutic treatment that comprises administering to the subject an A3 adenosine receptor (A3AR) agonist" who is "suffering from a certain inflammatory disease". This part of the rejection is respectfully traversed.

It has never been applicant's intent to claim a method of treatment. The claims are directed to a method of selecting a subject in an inflammatory state, which subject is suitable for anti-inflammatory treatment. The claims have now been amended to divide them into paragraphs so that is very clear what is in the preamble and what are the steps of the claims. Claim 15 has only two steps, a determining step and a selecting step. There is no treatment step. MPEP 2111 states that during patent examination, the pending claims must be "given their broadest reasonable interpretation consistent with the specification" [emphasis added]. If a claim has only two method steps, neither of which are drawn to a method of treatment, it is unreasonable to interpret the claim as requiring such an unclaimed step.

The preamble to claim 15 specifies that the subject that is being selected is one that in an inflammatory state and he or she is being selected for his or her suitability for anti-inflammatory therapeutic treatment by means of an A3AR agonist. The fact that a subject has been selected as being suitable for such anti-inflammatory treatment does not mean that the subject must then receive the therapeutic treatment.

Furthermore, a new claim set 22-26 and 28 has now been added, drawn to a method for determining the probability that a selected subject in an inflammatory state will respond

to A3AR treatment. This language is supported at page 11 of the specification, toward the end of the last paragraph. In this claim, one is determining the probability that a subject will respond to treatment with an A3AR agonist. The actual treatment with an A3AR agonist is not a method step that is present in the claim and the claim cannot be reasonably interpreted as requiring a method step of A3AR agonist treatment. One is only determining whether there is a probability that the subject will respond to such treatment if it is given. There is no positive step of therapeutic administration. One can conduct the method of claim 22 without ever treating the patient. Any other interpretation of the claim so as to effectively include a method step would be unreasonable and contrary to the explicit language of the claim. Reconsideration and withdrawal of this part of the rejection is therefore respectfully urged.

The examiner states that claim 15 recites the limitation "if said level is above a predetermined level," which the examiner considers to be confusing. The examiner states that the disclosure fails to clearly define such term. This part of the rejection is respectfully traversed.

The present specification explains the term "predetermined level" at page 11, lines 1-11. It is a level that can be determined empirically, based on a patient group,

the age group, the disease state, the disease history, etc. This is within the skill of one of ordinary in the art. Nevertheless, in order to create a greater degree of explicit clarity in the claim, in an attempt to obviate this rejection, the claims have been amended to delete use of the term "predetermined level" and to substitute the language "a predetermined threshold that is above the level of A3AR expression in WBCs of a healthy subject." This is supported by the language at page 11, lines 14-15, "above a predefined threshold," and the following two lines, which state that "the threshold is a certain multiple of the level of A3AR expression in WBC of a healthy subject." Thus it is clear that the predefined threshold is above the level of A3AR expression in WBC of a healthy subject. Claims 21 and 28 specify that the predefined level is "a multiple of the level" of A3AR expression in the WBCs of a healthy subject, as is supported by the same sentence of the specification.

These claims provide an objective determination as to what the predefined threshold is. How far above the level of expression of a healthy subject is something that can be determined empirically by the physicians conducting the test. But, objectively, it must be above the level of A3AR expression of a healthy subject, preferably a multiple thereof.

Furthermore, the language of new independent claim 22 is even better susceptible to this definition of predefined threshold. In claim 22, one is determining the probability that a selected subject in an inflammatory state will respond to anti-inflammatory therapeutic treatment by means of an A3AR agonist. The determination that there is a greater probability for response to the treatment is made if the A3AR expression level in a sample of white blood cells is above the predefined threshold that is above the level of A3AR expression in WBCs of a healthy subject. Even if there is a small increase over the level of a healthy patient, this would cause a greater probability that the patient will respond to treatment. The larger the increase, the greater the probability, but any increase will satisfy the language of claim 22. Accordingly, the acceptability of this language should be considered independently for the two independent claims. While it is believed that this language is not indefinite for claim 15, for the reasons discussed above, it is certainly not indefinite for claim 22.

Reconsideration and withdrawal of this rejection is therefore respectfully urged.

The examiner states that claims 16 and 17 are considered indefinite because they recite the limitation "said sample of WBC" and "the inflammatory state," while there is

insufficient antecedent basis for these limitations in the respective claims from which they depend.

Claim 15 has now been amended in order to provide explicit antecedent basis for the language used in claims 16 and 17. Accordingly, this part of the rejection has now been obviated.

Claim 19 has been rejected under 35 USC 112, second paragraph, as being indefinite in the use of the term "anti-inflammatory amount." This rejection is respectfully traversed.

Claim 19 has now been amended in order to clarify how it is dependent from claim 15. Like claim 15, it includes only two steps, the determining and selecting steps. It does not include a step of administering an anti-inflammatory amount of IB-MECA. This is only used in the preamble so as to define the treatment for which the suitability of treatment is being determined by the selection invention presently claimed. Thus, the term "anti-inflammatory amount" is only peripheral to the subject matter of the claim and need not be explicitly defined in the claim. Note MPEP 2173.05(c)III, which states that the phrase "an effective amount…for [a certain purpose]" was held to be definite where the amount was not critical. Certainly, the specific amount is not critical here as there is no administration step. There is no prior art that would

give rise to uncertainty about the scope of the claim. The same section of the MPEP states:

> The more recent cases have tended to accept a limitation such as "an effective amount" as being definite when read in light of the supporting disclosure and in the absence of any prior art which would give rise to uncertainty about the scope of the claim."

Those of ordinary skill in the art know how to treat inflammation with IB-MECA. This is not part of the present invention; it is only part of the preamble. Thus, it is not indefinite. Reconsideration and withdrawal of this rejection is respectfully urged.

Claims 15-20 have been rejected under 35 USC §112, first paragraph, as failing to comply with the enablement requirement. The examiner states that the present claims have been interpreted as being directed to a method of treating subjects suffering from "a certain inflammatory disease" that comprises selecting a subject as specifically recited in claim 15 and administering to the subject an A3AR agonist. The examiner states that the issue is whether or not the claimed invention could function for the intended treatment of any inflammatory disease. This rejection is respectfully traversed.

As discussed above in detail, the claims have now been amended to make clear that it would be totally inappropriate to interpret the claims as requiring an

administration step. The claims are directed only to a method of screening for subjects suitable for anti-inflammatory therapeutic treatment by means of an A3AR agonist or a method for determining the probability that such a subject will respond to such treatment. The claims, particularly as presently amended, cannot be interpreted as requiring an administration step. Accordingly, the entire enablement rejection is based on an interpretation of the claims which is no long applicable. Reconsideration and withdrawal of this rejection are therefore respectfully urged.

It is submitted that all of the claims now present in the case clearly define over the references of record and fully comply with 35 USC §112. Reconsideration and allowance are therefore earnestly solicited.

Respectfully submitted,

BROWDY AND NEIMARK, P.L.L.C.
Attorneys for Applicant(s)

By /rlb/
Roger L. Browdy
Registration No. 25,618

RLB:jhw
Telephone No.: (202) 628-5197
Facsimile No.: (202) 737-3528
G:\BN\C\cohn\Fishman19B\Pto\2009-02-09Amendment.doc